	Application No.	Applicant(s)
Notice of Allowability	10/840,212	EDSALL ET AL.
	Examiner	Art Unit	
	Toan D. Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *8/3/06*.

2. ☒ The allowed claim(s) is/are *1-44, 47-48 are renumbered 1-46, respectively*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date *7/21/05*

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
    Paper No./Mail Date *10/13/06* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Mr. James A. Blanchette on October 13, 2006.

2. The application has been amended as follows:

IN THE CLAIMS:

The following claim 47 as follows:

"47. (NEW) A computer readable medium containing executable program

instructions for operating a router, the executable program instructions comprising

program instructions configured to:

establish a primary VLAN, the primary VLAN to receive packets from outside of

the router through the one or more promiscuous ports and to transfer the packets to one

or more community ports, the primary VLAN to reject packets received from the one or

more community ports; and

establish a community VLAN, the community VLAN to receive packets from

outside the router on a community port of the one or more community ports and to

transfer the packets to the one or more promiscuous ports and to transfer the packets

to any other community ports of the one or more community ports, the community

VLAN rejecting packets received from the one or more promiscuous ports."

has been renumbered --- 48. (NEW) A computer readable medium containing

executable program instructions for operating a router, the executable program

instructions comprising program instructions configured to:

establish a primary VLAN, the primary VLAN to receive packets from outside of

the router through the one or more promiscuous ports and to transfer the packets to one

or more community ports, the primary VLAN to reject packets received from the one or

more community ports; and

establish a community VLAN, the community VLAN to receive packets from

outside the router on a community port of the one or more community ports and to

transfer the packets to the one or more promiscuous ports and to transfer the packets

to any other community ports of the one or more community ports, the community

VLAN rejecting packets received from the one or more promiscuous ports. ---

Allowable Subject Matter

3. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art fails to teach a combination of the steps of:

establishing a second VLAN from the plurality of user ports, the second VLAN

receiving packets from the user ports and transferring them to the port connected to the

shared network, the second VLAN preventing transfer of packets from one of the user

ports to other user ports, and the second VLAN also rejecting packets from the shared

network, in order to separate packet traffic of different users, in the specific combination as recited in the claim.

Regarding claim 3, the prior art fails to teach a combination of the steps of:

means for establishing a second VLAN from the plurality of user ports, the second VLAN receiving packets from the user ports and transferring them to the port connected to the shared network, the second VLAN preventing transfer of packets from one of the user ports to other user ports, and the second VLAN also rejecting packets from the shared network, in order to separate packet traffic of different users, in the specific combination as recited in the claim.

Regarding claim 5, the prior art fails to teach a combination of the steps of:

a second VLAN from the plurality of user ports, the second VLAN to receive packets from the user ports and transferring them to the port connected to the shared network, the second VLAN to prevent transfer of packets from one of the user ports to other user ports, and the second VLAN also to reject packets from the shared network, in order to separate packet traffic of different users, in the specific combination as recited in the claim.

Regarding claim 7, the prior art fails to teach a combination of the steps of:

an isolated VLAN, the isolated VLAN to receive packets from outside of the router through an isolated port of the one or more isolated ports and to transfer the packets to the one or more promiscuous ports, the isolated VLAN to prevent transfer of the packets from the isolated port to another isolated port of the one or more isolated ports, and the isolated VLAN to prevent transfer of the packets from the isolated port to

the one or more community ports, and the isolated VLAN to reject from a the one or more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 11, the prior art fails to teach a combination of the steps of:

an isolated VLAN, the isolated VLAN to receive packets from outside of the router through an isolated port of the one or more isolated ports and to transfer the packets to the one or more promiscuous ports, the isolated VLAN to prevent transfer of the packets from the isolated port to another isolated port of the one or more isolated ports, and the isolated VLAN to reject packets from the one or more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 12, the prior art fails to teach a combination of the steps of:

a community VLAN, the community VLAN to receive packets from outside the router at a community port of the one or more community ports and to transfer the packets to the one or more a promiscuous ports and to transfer the packets to any other community ports of the one or more community ports, the community VLAN reject packets from the one or more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 13, the prior art fails to teach a combination of the steps of:

a second VLAN, the second VLAN to receive packets from outside the router at the one or more other ports and to transfer the packets to the one or more promiscuous ports, the second VLAN to reject packets from the one or more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 15, the prior art fails to teach a combination of the steps of:

a second VLAN, the second VLAN to receive packets from outside the router at a

one or more other ports and to transfer the packets to the one or more promiscuous

ports of the one or more promiscuous ports, the second VLAN to reject packets from the

one or more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 18, the prior art fails to teach a combination of the steps of:

receiving a packets by an isolated VLAN, the isolated VLAN receiving the

packets from outside of the router through an isolated port of the one or more isolated

ports and transferring the packets to the one or more promiscuous ports, the isolated

VLAN preventing transfer of the packets from the isolated port to another isolated port

of the one or more isolated ports, and the isolated VLAN preventing transfer of the

packets from the isolated port to the one or more a community ports, and the isolated

VLAN rejecting packets from the one or more promiscuous ports, in the specific

combination as recited in the claim.

Regarding claim 22, the prior art fails to teach a combination of the steps of:

receiving packets by an isolated VLAN, the isolated VLAN receiving packets from

outside of the router through an isolated port of the one or more isolated ports and

transferring the packets to the one or more promiscuous ports, the isolated VLAN

preventing transfer of the packets from the isolated port to another isolated port of the

one or more isolated ports, and the isolated VLAN rejecting packets from the one or

more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 23, the prior art fails to teach a combination of the steps of:

receiving a packets by a community VLAN, the community VLAN receiving

packets from outside the router at a community port of the one or more community ports

and transferring the packets to a the one or more promiscuous ports and transferring

the packets to any other community ports of the one or more community ports, the

community VLAN rejecting packets from the one or more promiscuous ports, in the

specific combination as recited in the claim.

Regarding claim 24, the prior art fails to teach a combination of the steps of:

receiving a packets by a second VLAN, the second VLAN receiving packets from

outside the router at the one or more other ports and transferring the packets to the one

or more promiscuous ports, the second VLAN rejecting packets from the one or more

promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 26, the prior art fails to teach a combination of the steps of:

receiving a packets by a second VLAN, the second VLAN receiving packets from

outside the router at a one or more other ports and transferring the packets to a

promiscuous port of the one or more promiscuous ports, the second VLAN rejecting

packets from the one or more promiscuous ports, in the specific combination as recited

in the claim.

Regarding claim 29, the prior art fails to teach a combination of the steps of:

means for receiving a-packets by an isolated VLAN, the isolated VLAN receiving

the packets from outside of the router through an isolated port of the one or more

isolated ports and transferring the packets to the one or more promiscuous ports, the

isolated VLAN preventing transfer of the packets from the isolated port to another

isolated port of the one or more isolated ports, and the isolated VLAN preventing

transfer of the packets from the isolated port to the one or more a community ports, and

the isolated VLAN rejecting packets from the one or more promiscuous ports, in the

specific combination as recited in the claim.

Regarding claim 33, the prior art fails to teach a combination of the steps of:

means for receiving a-packets by an isolated VLAN, the isolated VLAN receiving

packets from outside of the router through an isolated port of the one or more isolated

ports and transferring the packets to the one or more promiscuous ports, the isolated

VLAN preventing transfer of the packets from the isolated port to another isolated port

of the one or more isolated ports, and the isolated VLAN rejecting packets from the one

or more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 34, the prior art fails to teach a combination of the steps of:

means for receiving a-packets by a community VLAN, the community VLAN

receiving packets from outside the router at a community port of the one or more

community ports and transferring the packets to the one or more promiscuous ports and

transferring the packets to any other community ports of the one or more community

ports, the community VLAN rejecting packets from the one or more promiscuous ports,

in the specific combination as recited in the claim.

Regarding claim 35, the prior art fails to teach a combination of the steps of:

means for receiving a-packets by a second VLAN, the second VLAN receiving

packets from outside the router at the one or more other ports and transferring the

packets to a the one or more promiscuous ports, the second VLAN rejecting packets

from the one or more promiscuous ports, in the specific combination as recited in the claim.

Regarding claim 39, the prior art fails to teach a combination of the steps of:

a first isolated VLAN within the router, the first isolated VLAN to receiving packets through an isolated port connected to the first LAN and to transferring the packets to the promiscuous port, the first isolated VLAN to prevent transfer of the packets from the isolated port connected to the first LAN to another isolated port, and the isolated VLAN rejecting packets from the one or more promiscuous ports; and

a second isolated VLAN within the router, the second isolated VLAN to receive packets through an isolated port connected to the second LAN and to transferring the packets to the promiscuous port, the second isolated VLAN to prevent transfer of the packets from the isolated port connected to the second LAN to another isolated port, and the second isolated VLAN to reject packets from the promiscuous port, in the specific combination as recited in the claim.

Regarding claim 40, the prior art fails to teach a combination of the steps of:

receiving packets by a first isolated VLAN within the router, the first isolated VLAN receiving packets through an isolated port connected to the first LAN and transferring the packets to the promiscuous port, the first isolated VLAN preventing transfer of the packets from the isolated port connected to the first LAN to another isolated port, and the first isolated VLAN rejecting packets from the one or more promiscuous ports; and

receiving packets by a second isolated VLAN within the router, the second

isolated VLAN receiving packets through an isolated port connected to the second LAN

and transferring the packets to the promiscuous port, the second isolated VLAN

preventing transfer of the packets from the isolated port connected to the second LAN

to another isolated port, and the second isolated VLAN rejecting packets from the

promiscuous port, in the specific combination as recited in the claim.

Regarding claim 41, the prior art fails to teach a combination of the steps of:

means for receiving a-packets by a first isolated VLAN within the router, the first

isolated VLAN receiving packets through an isolated port connected to the first LAN and

transferring the packets to the promiscuous port, the first isolated VLAN preventing

transfer of the packets from the isolated port connected to the first LAN to another

isolated port, and the first isolated VLAN rejecting packets from the one or more

promiscuous ports; and

means for receiving packets by a second isolated VLAN within the router, the

second isolated VLAN receiving packets through an isolated port connected to the

second LAN and transferring the packets to the promiscuous port, the second isolated

VLAN preventing transfer of the packets from the isolated port connected to the second

LAN to another isolated port, and the second isolated VLAN rejecting packets from the

promiscuous port, in the specific combination as recited in the claim.

Regarding claim 42, the prior art fails to teach a combination of the steps of:

a first community VLAN within the router, the first community VLAN to receive

packets through the first group of community ports connected to the first group of LANs

and to transferring the packets to the promiscuous port, the first community VLAN to prevent transfer of the packets from the first group of community ports to the second group of community ports, and the first community VLAN to reject packets from the one or more promiscuous ports; and

a second community VLAN within the router, the second community VLAN to receive packets through the second group of community ports connected to the second group of LANs and to transfer the packets to the promiscuous port, the second community VLAN to prevent transfer of the packets to the first group of community ports, and the second community VLAN to reject packets from the promiscuous port, in the specific combination as recited in the claim.

Regarding claim 43, the prior art fails to teach a combination of the steps of:

receiving packets from a first group of community ports by a first community VLAN within the router, the first community VLAN receiving packets through the first group of community ports connected to the first group of LANs and transferring the packets to the promiscuous port, the first community VLAN preventing transfer of the packets from the first group of community ports to the second group of community ports, and the first community VLAN rejecting packets from the one or more promiscuous ports; and

receiving packets from a second group of community ports by a second community VLAN within the router, the second community VLAN receiving packets through the second group of community ports connected to the second group of LANs and transferring the packets to the promiscuous port, the second community VLAN

preventing transfer of the packets to the first group of community ports, and the second

community VLAN rejecting packets from the promiscuous port, in the specific

combination as recited in the claim.

Regarding claim 44, the prior art fails to teach a combination of the steps of:

means for receiving packets from a first group of community ports by a first

community VLAN within the router, the first community VLAN receiving packets through

the first group of community ports connected to the first group of LANs and transferring

the packets to the promiscuous port, the first community VLAN preventing transfer of

the packets from the first group of community ports to the second group of community

ports, and the first community VLAN rejecting packets from the one or more

promiscuous ports; and

means for receiving packets from a second group of community ports by a

second community VLAN within the router, the second community VLAN receiving

packets through the second group of community ports connected to the second group of

LANs and transferring the packets to the promiscuous port, the second community

VLAN preventing transfer of the packets to the first group of community ports, and the

second community VLAN rejecting packets from the promiscuous port, in the specific

combination as recited in the claim.

Regarding claim 47, the prior art fails to teach a combination of the steps of:

establish a second VLAN from the plurality of user ports, the second VLAN to

receive packets from the user ports and to transfer them to the port connected to the

shared network, the second VLAN to prevent transfer of packets from one of the user

ports to other user ports, and the second VLAN also to reject packets from the shared network, to thereby separate packet traffic of different users, in the specific combination as recited in the claim.

Regarding claim 48, the prior art fails to teach a combination of the steps of:

establish a community VLAN, the community VLAN to receive packets from outside the router on a community port of the one or more community ports and to transfer the packets to the one or more promiscuous ports and to transfer the packets to any other community ports of the one or more community ports, the community VLAN rejecting packets received from the one or more promiscuous ports, in the specific combination as recited in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN
TN

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600